## **CLAIMS**

1. A compound of formula (I):

 $\mathbb{R}^3$   $\mathbb{R}^4$   $\mathbb{R}^5$   $\mathbb{R}^5$   $\mathbb{R}^3$   $\mathbb{R}^4$   $\mathbb{R}^5$   $\mathbb{R}^7$   $\mathbb{R}^7$ 

wherein:

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p is 0, 1, 2, 3 or 4;

each R¹ is the same or different and is independently selected from the group consisting of halo, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, Ay, Het, -OR¹, -OAy, -OR¹0Ay, -OHet, -OR¹0Het, -C(O)R9, -C(O)Ay, -C(O)Het, -CO₂R9, -C(O)NR²R8, -C(O)NR²Ay, -C(O)NHR¹0Ay, -C(O)NHR¹0Het, -C(S)NR9R¹¹,

 $-C(NH)NR^{7}R^{8}$ ,  $-C(NH)NR^{7}Ay$ ,  $-S(O)_{n}R^{9}$ ,  $-S(O)_{n}Ay$ ,  $-S(O)_{n}Het$ ,  $-S(O)_{2}NR^{7}R^{8}$ ,

 $-S(0)_2NR^7Ay, -NR^7R^8, -NR^7Ay, -NHHet, -NHR^{10}Ay, -NHR^{10}Het, -R^{10}cycloalkyl, -NHR^{10}Ay, -NHR$ 

 $-R^{10}Ay$ ,  $-R^{10}Het$ ,  $-R^{10}O_{-}C(O)R^{9}$ ,  $-R^{10}O_{-}C(O)Ay$ ,  $-R^{10}O_{-}C(O)Het$ ,  $-R^{10}O_{-}S(O)_{n}R^{9}$ ,

 $-R^{10}OR^9$ ,  $-R^{10}C(O)R^9$ ,  $-R^{10}CO_2R^9$ ,  $-R^{10}C(O)NR^9R^{11}$ ,  $-R^{10}C(O)NR^7Ay$ ,

 $-R^{10}C(O)NHR^{10}Het$ ,  $-R^{10}C(S)NR^9R^{11}$ ,  $-R^{10}C(NH)NR^9R^{11}$ ,  $-R^{10}SO_nR^9$ ,  $-R^{10}SO_2NR^9R^{11}$ ,

 $-R^{10}SO_2NHCOR^9$ ,  $-R^{10}NR^7R^8$ ,  $-R^{10}NR^7Ay$ ,  $-R^{10}NHC(NH)NR^9R^{11}$ , cyano, nitro and

20 azido; or

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two adjacent R¹ groups together with the atoms to which they are bonded form a C₅-₅cycloalkyl or a 5 or 6-membered heterocyclic ring containing 1 or 2 heteroatoms;

each  $\ensuremath{R^{7}}$  and  $\ensuremath{R^{8}}$  are the same or different and are independently selected from

the group consisting of H, alkyl, alkenyl, cycloalkyl, cycloalkenyl,

 $-C(O)R^9$ ,  $-CO_2R^9$ ,  $-C(O)NR^9R^{11}$ ,  $-C(S)NR^9R^{11}$ ,  $-C(NH)NR^9R^{11}$ ,  $-SO_2R^{10}$ ,

 $-SO_2NR^9R^{11}, -R^{10}cycloalkyl, -R^{10}OR^9, -R^{10}C(O)R^9, -R^{10}CO_2R^9,\\$ 

 $-R^{10}C(O)NR^9R^{11}$ ,  $-R^{10}C(S)NR^9R^{11}$ ,  $-R^{10}C(NH)NR^9R^{11}$ ,  $-R^{10}SO_2R^{10}$ ,

-R<sup>10</sup>SO<sub>2</sub>NR<sup>9</sup>R<sup>11</sup>, -R<sup>10</sup>SO<sub>2</sub>NHCOR<sup>9</sup>, -R<sup>10</sup>NR<sup>9</sup>R<sup>11</sup>, -R<sup>10</sup>NHCOR<sup>9</sup>,

-R10NHSO2R9 and -R10NHC(NH)NR9R11;

each  $R^9$  and  $R^{11}$  are the same or different and are independently selected from the group consisting of H, alkyl, cycloalkyl,  $-R^{10}$ cycloalkyl,  $-R^{10}$ OH,  $-R^{10}$ (OR $^{10}$ )w where w is 1–10, and  $-R^{10}$ NR $^{10}$ R $^{10}$ ;

each R<sup>10</sup> is the same or different and is independently selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl and cycloalkenyl;

Ay is aryl;

Het is a 5- or 6-membered heterocyclic or heteroaryl group;

R<sup>2</sup> is selected from the group consisting of halo, alkyl, alkenyl, cycloalkyl, cycloalkenyl,

Ay,  $H_{et}$ ,  $-OR^{7}$ , -OAy, -OHet,  $-OR^{10}Het$ ,  $-S(O)_{n}R^{9}$ ,  $-S(O)_{n}Ay$ ,  $-S(O)_{n}NR^{7}R^{8}$ ,

-S(O), Het, -NR<sup>7</sup>R<sup>8</sup>, -NHHet, -NHR<sup>10</sup>Ay, -NHR<sup>10</sup>Het, -R<sup>10</sup>NR<sup>7</sup>R<sup>8</sup> and -R<sup>10</sup>NR<sup>7</sup>Ay;

n is 0, 1 or 2;

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Y is N or CH;

 $R^3$  and  $R^4$  are the same or different and are each independently selected from the group consisting of H, halo, alkyl, alkenyl, cycloalkyl, Ay, Het,  $-\overrightarrow{OR}^7$ , -OAy,  $-C(O)R^7$ , -C(O)Ay,  $-CO_2R^7$ ,  $-CO_2Ay$ ,  $-SO_2NHR^9$ ,  $-NR^7R^8$ ,  $-NR^7Ay$ , -NHHet,

-NHR<sup>10</sup>Het, -R<sup>10</sup>cycloalkyl, -R<sup>10</sup>OR<sup>7</sup>, -R<sup>10</sup>OAy, -R<sup>10</sup>NR<sup>7</sup>R<sup>8</sup> and -R<sup>10</sup>NR<sup>7</sup>Ay;

R<sup>5</sup> is the selected from the group consisting of H, halo, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -OR<sup>7</sup>, -OAy, -OHet, -OR<sup>10</sup>Ay, -OR<sup>10</sup>Het, -C(O)R<sup>9</sup>,

 $-C(0)Ay, -C(0)Het, -CO_2R^9, -C(0)NR^7R^8, -C(0)NR^7Ay, -C(0)NHR^{10}Het, -CH(0R^9)_2,$ 

-CH(OR<sup>9</sup>)-R<sup>10</sup>, -CH(OR<sup>9</sup>)-Ay, -C(S)NR<sup>9</sup>R<sup>11</sup>, -C(NH)NR<sup>7</sup>R<sup>8</sup>, -C(NH)NR<sup>7</sup>Ay, -S(O)<sub>n</sub>R<sup>9</sup>,

-S(0)<sub>2</sub>NR<sup>7</sup>R<sup>8</sup>, -S(0)<sub>2</sub>NR<sup>7</sup>Ay, -NR<sup>7</sup>R<sup>8</sup>, -NR<sup>7</sup>Ay, -NHHet, -NHR<sup>10</sup>Ay, -NHR<sup>10</sup>Het,

-R10cycloalkyl, -R10Ay, -R10Het, -R10OR9, -R10C(O)R9, -R10C(O)Ay, -R10C(O)Het,

 $-R^{10}CO_2R^9$ ,  $-R^{10}C(O)NR^9R^{11}$ ,  $-R^{10}C(O)NR^7Ay$ ,  $-R^{10}C(O)NHR^{10}Het$ ,  $-R^{10}CH(OR^9)-R^{10}$ ;

 $-R^{10}CH(OR^9)-Ay, -R^{10}C(S)NR^9R^{11}, -R^{10}C(NH)NR^9R^{11}, -R^{10}SO_{\scriptscriptstyle{1}}R^9, -R^{10}SO_{\scriptscriptstyle{2}}NR^9R^{11}, -R^{10}SO_{\scriptscriptstyle{1}}R^9, -R^{10}SO_{\scriptscriptstyle{2}}NR^9R^{11}, -R^{10}SO_{\scriptscriptstyle{3}}R^9, -R^{10}SO_{\scriptscriptstyle{4}}R^9R^{11}, -R^{10}SO_{\scriptscriptstyle{4}}R^9R^{11}, -R^{10}SO_{\scriptscriptstyle{4}}R^9R^{11}, -R^{10}SO_{\scriptscriptstyle{5}}R^9R^{11}, -R^{10}SO_{\scriptscriptstyle{6}}R^9R^{11}, -R^{10}SO_{\scriptscriptstyle{6}}R^{10}, -R^{10}SO_{\scriptscriptstyle{6}}R^{$ 

-R¹°SO₂NHCOR<sup>9</sup>, -R¹°NR<sup>7</sup>R<sup>8</sup>, -R¹°NR<sup>7</sup>Ay, -R¹°NHC(NH)NR<sup>9</sup>R¹¹, cyano, nitro and azido; or

wherein when Y is CH, R3 is not -NR7Ay;

or a pharmaceutically acceptable salt, solvate or physiologically functional derivative thereof.

- 2. The compound according to claim 1 wherein each  $R^1$  is the same or different and is independently selected from the group consisting of halo, alkyl, cycloalkyl, Ay, Het,  $-OR^7$ ,  $-C(O)R^9$ , -C(O)Het,  $-CO_2R^9$ ,  $-C(O)NR^7R^8$ ,  $-C(O)NR^7Ay$ ,  $-C(O)NHR^{10}Het$ ,  $-S(O)_2NR^7R^8$ ,  $-S(O)_2NR^7Ay$ ,  $-NR^7Ay$ ,  $-NR^7Ay$ , -NHHet,  $-NHR^{10}Ay$ ,  $-NHR^{10}Het$ ,  $-R^{10}C(O)NR^7Ay$ ,  $-R^{10}C(O)NR^7Ay$ ,  $-R^{10}CO^9$ ,  $-R^{10}NR^7R^8$ ,  $-R^{10}NR^7Ay$ , cyano, nitro and azido.
- 3. The compound according to claim 1 wherein each  $R^1$  is the same or different and is independently selected from the group consisting of halo, Ay, Het,  $-NR^7R^8$  and  $-NR^7Ay$ .
- 4. The compound according to any of claims 1-3 wherein p is 0 or 1.
- 5. The compound according to any of claims 1-4 wherein R<sup>2</sup> is selected from the group consisting of halo, alkenyl, cycloalkyl, cycloalkenyl, Ay, Het, -OR<sup>7</sup>, -OAy, -OHet, -OR<sup>10</sup>Het, -S(O)<sub>n</sub>R<sup>9</sup>, -NR<sup>7</sup>R<sup>8</sup>, -NHHet, -NHR<sup>10</sup>Het, -R<sup>10</sup>NR<sup>7</sup>R<sup>8</sup> and -R<sup>10</sup>NR<sup>7</sup>Ay.
  - 6. The compound according to any of claims 1-4 wherein  $R^2$  is  $-NR^7R^8$ .
- 20 7. The compound according to any of claims 1-6 wherein Y is N.
  - 8. The compound according to any of claims 1-6 wherein Y is CH.
- 9. The compound according to any of claims 1–8 wherein R³ and R⁴ are the same or different and are each independently selected from the group consisting of H, halo, alkyl, Ay, -OR³, -CO₂R³, -NR³R8, -R¹OOR³ and -R¹ONR³R8.
  - 10. The compound according to any of claims 1-9 wherein R<sup>3</sup> and R<sup>4</sup> are both H.
- 11. The compound according to any of claims 1-10 wherein R<sup>5</sup> is selected from the group consisting of halo, alkyl, cycloalkyl, -OR<sup>7</sup>, -C(O)R<sup>9</sup>, -C(O)Ay, -C(O)Het,

- -CH(OR<sup>9</sup>)-R<sup>10</sup>, -CH(OR<sup>9</sup>)-Ay, -S(O)<sub>0</sub>R<sup>9</sup>, -S(O)<sub>2</sub>NR<sup>7</sup>R<sup>8</sup>, -NR<sup>7</sup>R<sup>8</sup>, -NR<sup>7</sup>Ay, -R<sup>10</sup>Cycloalkyl, -R<sup>10</sup>Ay, -R<sup>10</sup>Het, -R<sup>10</sup>OR<sup>9</sup>, -R<sup>10</sup>C(O)R<sup>9</sup>, -R<sup>10</sup>SO<sub>2</sub>NR<sup>9</sup>R<sup>11</sup> and -R<sup>10</sup>NR<sup>7</sup>R<sup>8</sup>.
- 12. The compound according to any of claims 1–10, wherein R⁵ is selected from the group consisting of alkyl, -C(O)Ay, -CH(OR⁵)-Ay, -R¹⁰cycloalkyl, -R¹⁰Ay, -R¹⁰OR⁵ and -R¹⁰NR⁵R⁵.
  - 13. A compound selected from the group consisting of:
  - 3-(2-Fluoropyridin-4-yl)-2-propylpyrazolo[1,5-a]pyridine;
- 10 N-Cyclopentyl-4-(2-propylpyrazolo[1,5-a]pyridin-3-yl)pyridin-2-amine;
  - 7-Chloro-3-(2-fluoropyridin-4-yl)-2-propylpyrazolo[1,5-a]pyridine;
  - *N*-Cyclopentyl-3-[2-(cyclopentylamino)pyridin-4-yl]-2-propylpyrazolo[1,5-a]pyridin-7-amine;
  - 2-lsobutyl-3-[2-(methylthio)pyrimidin-4-yl]pyrazolo[1,5-a]pyridine;
- 2-lsobutyl-3-[2-(methylsulfinyl)pyrimidin-4-yl]pyrazolo[1,5-a]pyridine;

- N-Cyclopentyl-4-(2-isobutylpyrazolo[1,5-a]pyridin-3-yl)pyrimidin-2-amine;
- *N*-Cyclopentyl-4-[2-isobutyl-7-(methylthio)pyrazolo[1,5-a]pyridin-3-yl]pyrimidin-2-amine;
- N-Cyclopentyl-4-[2-isobutyl-7-(methylsulfinyl)pyrazolo[1,5-a]pyridin-3-yl]pyrimidin-2-amine;
  - *N*-Cyclopentyl-3-[2-(cyclopentylamino)pyrimidin-4-yl]-2-isobutylpyrazolo[1,5-a]pyridin-7-amine;
  - 2-(Diethoxymethyl)-3-[2-(methylthio)pyrimidin-4-yl]pyrazolo[1,5-a]pyridine;
  - 3-[2-(Methylthio)pyrimidin-4-yl]pyrazolo[1,5-a]pyridine-2-carbaldehyde;
- 25  ${3-[2-(methylthio)pyrimidin-4-yl]pyrazolo[1,5-a]pyridin-2-yl}(phenyl)methanol;$ 
  - ${3-[2-(Cyclopentylamino)-4-pyrimidinyl]pyrazolo[1,5-<math>\sigma$ ]pyridin-2-yl}(phenyl)methanol;
  - {3-[2-(Cyclopentylamino)-4-pyrimidinyl]pyrazolo[1,5-a]pyridin-2-yl}(phenyl)methanone;
- 30 {7-(Cyclopentylamino)-3-[2-(cyclopentylamino)-4-pyrimidinyl]pyrazolo[1,5-α]pyridin-2-yl}(phenyl)methanone;

- 4-(2-Benzylpyrazolo[1,5-a]pyridin-3-yl)-N-cyclopentyl-2-pyrimidinamine;
- 4-(2-Benzyl-7-chloropyrazolo[1,5-a]pyridin-3-yl)-N-cyclopentyl-2-pyrimidinamine;
- $N-\{4-[2-Benzyl-7-(cyclopentylamino)pyrazolo[1,5-a]pyridin-3-yl]-2-pyrimidinyl\}-N-cyclopentylamine;$
- 5 *N*-Cyclopentyl-4-[2-(methoxymethyl)pyrazolo[1,5-α]pyridin-3-yl]-2-pyrimidinamine;
  - *N*-Cyclopentyl-4–[2-(methoxymethyl)-7-(methylsulfanyl)pyrazolo[1,5-*a*]pyridin-3-yl]-2-pyrimidinamine;
  - *N*-Cyclopentyl-3-[2-(cyclopentylamino)-4-pyrimidinyl]-2-(methoxymethyl)pyrazolo[1,5-a]pyridin-7-amine;
- 10 *N*-Cyclopentyl-3-[2-(cyclopentylamino)-4-pyrimidinyl]-2-[3-(1-pyrrolidinyl)propyl]pyrazolo[1,5-a]pyridin-7-amine;
  - $N-({3-[2-(Methylsulfanyl)-4-pyrimidinyl]pyrazolo[1,5-a]pyridin-2-yl}methyl)-2-propanamine;$
  - *N*-Cyclopentyl-4-{2-[(isopropylamino)methyl]pyrazolo[1,5-*a*]pyridin-3-yl}-2-pyrimidinamine;
  - N-Cyclopentyl-3-[2-(cyclopentylamino)-4-pyrimidinyl]-2-[(isopropylamino)methyl]- pyrazolo[1,5-a]pyridin-7-amine;
  - 4-{7-Chloro-2-[3-(isopropylamino)propyl]pyrazolo[1,5-a]pyridin-3-yl}-N-cyclopentyl-2-pyrimidinamine;
- 20 *N*-Cyclopentyl-3-[2-(cyclopentylamino)-4-pyrimidinyl]-2-[3-(isopropylamino)propyl]pyrazolo[1,5-*a*]pyridin-7-amine;
  - 4-{7-Chloro-2-[(2-methoxyethoxy)methyl]pyrazolo[1,5-a]pyridin-3-yl}-*N*-cyclopentyl-2-pyrimidinamine;
  - 3-[2-(Cyclopentylamino)-4-pyrimidinyl]-2-[(2-methoxyethoxy)methyl]-N-(2-methoxyethyl)pyrazolo[1,5-a]pyridin-7-amine;
  - N-Cyclopentyl-3-[2-(cyclopentylamino)-4-pyrimidinyl]-2-[(2-methoxyethoxy)-methyl]pyrazolo[1,5-a]pyridin-7-amine;
  - N-Cyclopentyl-4-(2-isopropylpyrazolo[1,5- $\alpha$ ]pyridin-3-yl)pyrimidin-2-amine; N-Cyclo

- N-Cyclopentyl-4-(2-cyclopropylpyrazolo[1,5-a]pyridin-3-yl)pyrimidin-2-amine; and N-Cyclopentyl-3-[2-(cyclopentylamino)pyrimidin-4-yl]-2-cyclopropylpyrazolo[1,5-a]pyridin-7-amine;
- or a pharmaceutically acceptable salt, solvate or physiologically functional derivative thereof.
  - 14. A pharmaceutical composition comprising a compound according to any of claims 1–13.
- 15. The pharmaceutical composition according to claim 14 further comprising a pharmaceutically acceptable carrier or diluent.
  - 16. The pharmaceutical composition according to any of claims 14 or 15, further comprising an antiviral agent selected from the group consisting of aciclovir and valaciclovir or a pharmaceutically acceptable salt thereof.
  - 17. A method for the prophylaxis or treatment of a herpes viral infection in an animal, said method comprising administering to the animal a therapeutically effective amount of a compound according to any of claims 1–13.
  - 18. The method according to claim 17 wherein said herpes viral infection is selected from the group consisting of herpes simplex virus 1, herpes simplex virus 2, cytomegalovirus, Epstein Barr virus, varicella zoster virus, human herpes virus 6, human herpes virus 7, and human herpes virus 8.
  - 19. A method for the prophylaxis or treatment of a condition or disease associated with a herpes viral infection in an animal, comprising administering to the animal a therapeutically effective amount of a compound according to any of claims 1-13.

- 20. A process for preparing a compound according to any of claims 1-13 comprising the steps of:
- a) coupling a compound of formula (II):

$$R^3$$
 $X$ 
 $X$ 
 $R^2$ 

wherein X is chloro, bromo, iodo or triflate;

10 to a terminal alkyne of formula (III):

to prepare a compound of formula (IV):

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$$R^3$$
 $R^4$ 
 $R^5$ 
 $R^5$ 
 $R^2$ 

and

b) reacting an N-amino pyridinium salt of formula (V):

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$$(R^1)_p$$

wherein Z- is a counterion;

- with the compound of the formula (IV) to prepare a compound of formula (I).
  - 21. The process according to claim 20 further comprising the step of converting the compound of formula (I) to a pharmaceutically acceptable salt, solvate or physiologically functional derivative thereof.

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22. The process according to claim 20 further comprising the step of converting the compound of formula (I) or a pharmaceutically acceptable salt, solvate or

physiologically functional derivative thereof to another compound of formula (I) or a pharmaceutically acceptable salt, solvate or physiologically functional derivative thereof.

- 5 23. A compound according to any of Claims 1-13 for use in therapy.
  - 24. A compound according to any of Claims 1-13, for use in the prophylaxis or treatment of a herpes viral infection in an animal.
- 10 25. A compound according to any of Claims 1-13, for use in the prophylaxis or treatment of a condition or disease associated with a herpes viral infection in an animal.
- 26. The use of a compound according to any of claims 1-13 for the preparation of a medicament for the prophylaxis or treatment of a herpes viral infection in an animal.
  - 27. The use of a compound according to any of claims 1–13 for the preparation of a medicament for the prophylaxis or treatment of a condition or disease associated with a herpes viral infection in an animal.
  - 28. A pharmaceutical composition comprising a compound according to any of claims 1–13 for use in the prophylaxis or treatment of a herpes viral infection in an animal.